Amendments to the Specification

Please amend the below-identified paragraphs of the specification as follows:

[0005] In this case, a recording medium driving apparatus using the spindle motor or ~~the other~~ another apparatus is promoted in a downsizing and a thin structure, and the spindle motor used in the apparatus is also promoted in a downsizing and a thin structure. Accordingly, an area in the spindle motor in which the oil repellent film should be formed for preventing the lubricating oil from leaking out is going to be further narrowed.

[0013] In this case, the peeling step can employ a method of ~~sucking~~ suctioning and thereby removing the supplied excess oil repellent solution, or a method of blowing ~~out~~ and thereby removing the supplied excess oil repellent solution.

[0014] Another manufacturing method of a spindle motor comprises a step of supplying an oil repellent solution by a supplying portion onto a part of the predetermined area for forming the oil repellent film, a step of applying an air current onto the part of the predetermined area on which the oil repellent solution is supplied so as to peel off an excess part of the oil repellent solution supplied to the part of the predetermined area, a step of making a relative movement of the predetermined area in which the oil repellent film is formed, and the relative movement is made with respect to the supplying portion, a step of supplying a solvent for ~~solving~~ dissolving the excess part of said oil repellent solution, peeled off in said applying air current step; and a step of removing said oil repellent solution dissolved by the solvent.

[0016] FIG. 1 is a ~~cross sectional~~ cross-sectional view showing a spindle motor which can be manufactured using in part a method in accordance with the present invention;

[0017] ~~FIG. 2 is a partly~~ FIG. 2a and FIG. 2b are each an enlarged ~~cross sectional~~ cross-sectional view of a respective part of the spindle motor in FIG. 1;

[0025] FIG. 10 is a ~~cross sectional~~ cross-sectional view showing a coating step of the oil repellent solution in accordance with a second embodiment of the present invention;

[0030] FIG. 1 shows an example of a spindle motor ~~showing~~ to which the present invention may be applied. ~~FIG. 2 is a partly~~ FIGS. 2a and 2b are each an enlarged ~~cross sectional~~ cross-sectional view of a respective portion of the spindle motor shown in FIG. 1.

[0034] Each ~~lubricating~~ oil repellent film 66 is formed by applying an oil repellent solution to the predetermined area on the surfaces of the shaft 58 and/or the sleeve 60, and thereafter removing a solvent by means of an oven heating or the like.

[0037] The description given below ~~as~~ is of an example ~~that~~ in which the oil repellent solution is applied to the shaft of the hydrodynamic bearing. In this case, for convenience of description, positional relationships between the ~~positions of~~ parts of the coating apparatus are described ~~in~~ with respect to the rotational axis ~~direction~~ of the shaft. The part holding device 12 holds a lower end portion or an upper end portion of the shaft 58 corresponding to the oil repellent solution coated part, is driven by a rotation driving apparatus (not shown), and rotates the ~~holding~~ held shaft 58 in one direction. In this example, the part holding device 12 drives the part in a

counterclockwise direction as shown in FIG. 3. In this case, ~~a~~ the amount of clockwise ~~direction~~ rotation may be set by taking an amount of application of the oil repellent solution and a solidifying time into consideration. The oil repellent solution is applied to two areas apart from each other at a fixed distance in the direction of the rotational axis, on the outer peripheral surface of the shaft 58. In this case, the area to which the oil repellent solution is applied is not limited to two areas, and may be set to one area or three areas. Further, the area in the shaft 58 to which the oil repellent solution is applied is not limited to the outer peripheral surface of the shaft 58, but may be the upper end surface or the lower end surface of the shaft 58. Further, it is not always necessary to rotate the shaft 58, however, in the case of not rotating, it is necessary that the oil repellent solution supplying area and the coated area on the part are relatively displaced by the other means.

[0039] A suction port 16d is formed in a center portion with respect to ~~a width in~~ the rotational axis direction, on the curved surface of each of the recess portions 16c. In an opening portion 16e (refer to FIG. 9) of the suction port 16d, a width in rotational axis direction of the opening portion 16e is approximately equal to a width in rotational axis direction of the predetermined area of the outer peripheral surface of the shaft 58 to which the oil repellent solution is applied. Further, the opening portion 16e is formed on the recess portion 16c at a center area of the width in rotational axis direction of the rectangular protruding portion 16b. As shown in FIG. 9, the suction port 16d has a depth from the opening 16e to the lower side (that is down ward side, the direction toward a suction tube 16f as shown in FIG. 9), and a ~~down-ward~~ downward side of the suction port 16d is inclined in an approximately funnel shape from the opening 16e to a bottom portion ~~in down ward~~ downward, that is a center portion. Further, an upper end of the suction tube 16f extending to a lower side is open to the center portion. The suction tube 16f ~~is communicated~~ communicates with

an exhaust apparatus such as an exhaust pump (not shown) or the like.

[0042] In this case, it is preferable to supply the solvent from an upstream side (a left side in FIG. 9) in the rotational direction of the shaft 58 in the suction port 16d. In other words, it is preferable to arrange the opening portion 18a of the solvent supply tube 18 ~~in~~ at an upstream side in the rotational direction of the shaft 58 in the suction port 16d. This is because the oil repellent solution coated in the upper portion of the predetermined area of the shaft 58 to which the oil repellent solution is applied flows more ~~in~~ at the upstream side than ~~in~~ at the downstream side ~~in the~~ during rotation. Accordingly, it is possible to securely prevent the solid-state oil repellent from being generated from the ~~sucked~~ suctioned oil repellent solution, by supplying the solvent to the upstream side in the rotational direction of the shaft 58. Further, the solvent supply tube 18 is not limited to this, and may be provided, for example, ~~in~~ at both the upstream side and the downstream side.

[0045] Next, as shown in FIG. 4, the pedestal 16a is moved upward, and the recess portion 16c in each of the protruding portions 16d of the pedestal 16a is arranged in parallel just below the center axis of the shaft 58 held by the part holding device 12. At this time, a predetermined radial gap (for example, 0.5 to 4 mm, preferably 1 to 2 mm) is formed between the recess portion 16c and the outer peripheral surface of the shaft 58. Further, the opening portion 16e of the recess portion 16c is opposed to a part of the predetermined area on the outer peripheral surface of the shaft 58, onto which the oil repellent solution should be applied, in the radial direction. In this case, it is preferable that the radial gap between the recess portion 16c and the outer peripheral surface of the shaft 58 is approximately constant in the axial direction except at the opening portion 16e. Further, the suction apparatus 16 is operated at the same time of moving upward the pedestal 16a, and the suction is

started.

[0046] Further, as shown in FIG. 5, a pair of oil repellent solution supplying nozzles 14 are moved downward, and the leading end portions of the oil repellent solution supplying nozzles 14 are arranged just above ~~the part of the~~ predetermined ~~area~~ areas of the outer peripheral surface of the shaft 58, respectively, ~~at the~~ with a slight gap therebetween. The opening portion 16e of the suction port 16d is positioned just below the leading end portions of the oil repellent solution supplying nozzles 14 and the part of the predetermined area of the outer peripheral surface of the ~~shat~~ shaft 58.

[0054] Finally, as shown in FIG. 5, when the application of the oil repellent solution to the predetermined area on the outer peripheral surface of the shaft 58 is finished, the oil repellent solution supplying nozzles 14 are moved upward, and ~~is~~ are moved apart from the shaft 58. At this time, the solvent supplying apparatus continuously supplies the solvent into the suction port 16d from the opening portion 18a, and the suction apparatus 16 continuously ~~sucks~~ generates suction.

[0057] Subsequently, the oil repellent solution suction nozzle 76 is operated and the suction is started. At the same time of operating the oil repellent solution suction nozzle 76, or after the operation, the oil repellent solution supplying nozzle 74 is operated, and the oil repellent solution is applied to the part of the predetermined area of the sleeve 60. Further, when the oil repellent solution supplying nozzle 74 finishes applying the oil repellent solution to the predetermined area of the sleeve ~~74~~ 60, the oil repellent solution supplying nozzle 74 is moved upward, and is moved apart from the sleeve 74. At this time, the oil repellent solution suction nozzle 76 continuously ~~sucks~~ generates suction.